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(Reaffirmed 2011)
(Reaffirmed 2016)

Indian Standard
SPECIFICATION FOR MOLYBDENUM OXIDE (TECHNICAL)
(First Revision)

UDC 661·877·22

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(*Page* 4, *clause* 2.1, *second column, first entry under 'Percent'*) — Substitute '55.0 *Min*' *for* '5.50 *Min*'.

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Indian Standard

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Indian Standard
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0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 11 February 1987, after the draft finalized by the Ferro Alloys Sectional Committee had been approved by the Structural and Metals Division Council.

0.2 This standard was first published in 1970. In this first revision, limits of various constituents have been modified in the light of the experience gained during this period.

0.3 Molybdenum oxide (technical) is used as basic raw material for the production of ferro molybdenum. It is also used for alloy additions in steel industry.

0.4 In formulating this standard, the trade practices followed in the country in this field have been kept in view.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard covers the requirements for molybdenum oxide (technical).

2. GRADE

2.1 Molybdenum oxide (technical) shall be of one grade with the following requirements:

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*Rules for rounding off numerical values (*revised*).

Constituents	*Percent*
Mo	5·50 *Min*
Cu	0·15 *Max*
C	0·01 *Max*
Si	3·50 *Max*
Al	0·25 *Max*
P	0·05 *Max*
S	0·05 *Max*
Pb	0·05 *Max*
Sn	0·01 *Max*

3. SUPPLY OF MATERIAL

3.1 General requirements relating to the supply of molybdenum oxide shall be as laid down in IS : 1387-1967*.

4. CHEMICAL COMPOSITION

4.1 The chemical composition, when determined by any established instrumental/chemical method, shall be as given in **2.1**. In case of dispute, the procedure mutually agreed between the manufacturer and the purchaser shall be the referee method till an Indian Standard on the methods of chemical analysis on molybdenum oxide (technical) is published.

5. FORM AND SIZE

5.1 The form of material and size shall be as agreed to between the purchaser and the supplier.

6. PACKING

6.1 The materials shall be packed in sealed containers with convenient equivalent molybdenum content in each, for example, 2, 5, 10, 25, 50 and 100 kg of molybdenum per container, as agreed to between the purchaser and the supplier.

7. SAMPLING

7.1 The material shall be sampled as agreed to between the purchaser and the supplier.

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*General requirements for the supply of metallurgical materials (*first revision*).

8. MARKING

8.1 The material shall be marked with supplier's name or trade-mark.

8.1.1 The material may also be marked with the Standard Mark.

NOTE — The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act 1986 and the Rules and Regulations made thereunder. The Standard Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

QUANTITY	UNIT	SYMBOL
Plane Angle	radian	rad
Solid angle	steradian	sr

Derived Units

QUANTITY	UNIT	SYMBOL	DEFINITION
Force	newton	N	$1 \text{ N} = 1 \text{ kg.m/s}^2$
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	$1 \text{ T} = 1 \text{ Wb/m}^2$
Frequency	hertz	Hz	$1 \text{ Hz} = 1 \text{ c/s } (\text{s}^{-1})$
Electric conductance	siemens	S	1 S = 1 A/V
Electromotive force	volt	V	1 V = 1 W/A
Pressure, stress	pascal	Pa	$1 \text{ Pa} = 1 \text{ N/m}^2$

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